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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,276	02/11/2005	Gabriel Ilan	28686	9993
7590	09/25/2006		EXAMINER	
Martin Moynihan Anthony Castorina Suite 207 2001 Jefferson Davis Highway Arlington, VA 22202			NATNAEL, PAULOS M	
			ART UNIT	PAPER NUMBER
			2622	
DATE MAILED: 09/25/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/524,276	ILAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paulos M. Natnael	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-73 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-27,29-32,43-45,49,50,63 and 71 is/are rejected.
- 7) Claim(s) 28,33-42,46-48,51-62,64-70,72 and 73 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 11 February 2005 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 3/17/06.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 101***

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 recites "A video signal having data encoding a visual image [sic] over successive frames each frame comprising scan lines of pixels, said video signal carrying data for optical detection via said image, wherein said visual image comprises at least one defined region and said optical data is encoded within scan lines within said defined region." Claim 1 and its dependent claims are therefore directed to a signal per se, a non-statutory subject matter.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 24-32, 43-73** rejected under 35 U.S.C. 102(e) as being anticipated by Ciardullo et al., U.S. Patent No. 6,094,228.

Considering claim **24,43, and 72**, Ciardullo et al. (hereinafter, "Ciardullo") discloses a method of encoding data in the visible portion of a transmitted video signal without degrading display of the received video signal, and for decoding the data in the received video signal. Each group of data bits to be transmitted, referred to a data symbol, is associated with one of a number of longer predetermined sequences of chips. Each chip sequence is divided into a multiplicity of lines of chips, and each line of chips together with its inverse are embedded, in pairwise fashion, in respective pairs of line scans of the video signal prior to its transmission. Received pairs of line scans are operated upon to detect the lines of chips they represent, and each of the number of chip sequences is correlated with the detected line of chips to derive a correlation magnitude. The chip sequence with the largest correlation magnitude is selected as the chip sequence whose data symbol was transmitted. (See Abstract of disclosure). Ciardullo further discloses that the video signal with the superimposed data can be detected optically, as in the above-identified Broughton et al. patent, or it can be detected electrically by operating on the video signal directly. col.16, line 58+. Furthermore, on Fig.3 Ciardullo discloses an apparatus for encoding of a video

signal. As illustrated in Fig.5, the system of Ciardullo discloses a decoder. Thus, Ciardullo discloses all claimed subject matter.

Considering claims 25-27, Ciardullo discloses the encoder Fig.3 which determines where in the viewable portion of the video signal to encode the signal.

Considering claims 29-31, any viewable portion of the video signal on the screen would inherently be rectangular.

Considering claims 32, Ciardullo discloses color modulation. Col. 17, lines 39+.

Considering claim 43, see rejection claim 1;

Considering claim 44, Ciardullo discloses the term video signal applies any representations of the standard NTSC, PAL or SECAM signals in common use for video transmission including the analog form,...or other digital representations... Col. 1, lines 38-49).

As to claims 45, 49-50, see rejection of claim 44.

Regarding claim 63, see rejection of claim 42.

Regarding claim 73, Ciardullo discloses that error correction techniques can be used.  
(col.. 4, lines 30-46)

***Allowable Subject Matter***

5. Claims **28,33-42, 46-48, 51-62,64-70, and 73**, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

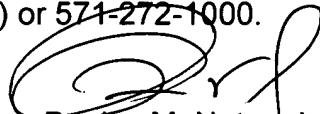
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Baer, U.S. Patent No. 3,993,861 discloses a digital video modulation and demodulation system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (571) 272-7354. The examiner can normally be reached on 7AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Paulos M. Natnael  
Primary Examiner  
Art Unit 2622

September 17, 2006